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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,778	03/03/2004	Pierre Cornilleau	0513-1099	3225
<div>466 7590 07/26/2007 YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202</div>				
			EXAMINER ING, MATTHEW W	
			ART UNIT 3637	PAPER NUMBER
			MAIL DATE 07/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,778

Applicant(s)

CORNILLEAU, PIERRE

Examiner

Matthew W. Ing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 27 June 2007 has been entered.

Claim Rejections - 35 USC § 112

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 20-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims are replete with indefinite language, of which the following citations are merely a representative sample.

4. Regarding claim 20, the term "said folded locked state" in line 14 lacks antecedent basis in the claim.

5. Claim 20 fails to recite sufficient structural elements and interconnection of the elements to positively position and define the structure & component(s) of the "abutment means" so that an integral structure able to function as claimed is recited.

6. The terms "close to" and "corresponding to" in claim 20 are a relative term which render the claim indefinite. The terms "close to" and "corresponding to" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite

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degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

7. Regarding claim 21, the term "its" in line 2 lacks antecedent basis in the claim.

8. Regarding claim 21, the term "the above-mentioned locking means" in line 5 lacks antecedent basis in the claim.

9. The term "generally" in Claim 21 is a relative term which renders the claim indefinite. The term "generally" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

10. Regarding claim 22, the term "the other catch" in line 5 lacks antecedent basis in the claim.

11. Regarding claim 22, the term "its other state" in line 3 lacks antecedent basis in the claim.

12. Regarding claim 24, the term "them" in line 3 lacks antecedent basis in the claim.

13. Regarding claim 24, the term "their resilient return means" in line 3 lacks antecedent basis in the claim.

14. Regarding claim 24, the term "said means" in line 3 lacks antecedent basis in the claim.

15. Regarding claim 24, the term "the table top" in line 5 lacks antecedent basis in the claim.

16. The term "to the vicinity of" in Claim 24 is a relative term which renders the claim indefinite. The term "to the vicinity of" is not defined by the claim, the

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specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

17. Regarding claim 25, the term “the table top” in line 5 lacks antecedent basis in the claim.

18. Regarding claim 26, the term “the above-mentioned racks” in lines 2-3 lacks antecedent basis in the claim.

19. Regarding claim 26, the term “the racks” in line 4 lacks antecedent basis in the claim.

20. Regarding claim 27, the term “it” in line 2 lacks antecedent basis in the claim.

21. Regarding claim 28, the term “the push rod” in line 2 lacks antecedent basis in the claim.

22. Claim 23 is considered indefinite since it depends from an indefinite base claim.

Claim Rejections - 35 USC § 102

23. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Mueller (4,027,600). Mueller teaches a folding table comprising a support (20), two table tops (11, 12) that are movable relative to the support between a horizontal position (see Figure 1) and a vertical position (see Figure 7), each table top co-operating with the support to form a structure of configuration that is reversibly deformable between an unfolded state corresponding to the horizontal position of the table top and a folded state corresponding to the vertical position of the table top, which structure includes retractable locking means (56, 62) to lock it in at least one of said two states, wherein the deformable structure includes abutment means (56, 77) that engage when its configuration comes

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close to a configuration corresponding to a locked state, thereby opposing reversibility in said configuration (see Figure 2).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

25. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

26. Claim 20 can be alternately rejected, along with claims 21-24, under 35 U.S.C. 103(a) as being unpatentable over Cornilleau (FR 2,729,302) in view of Methven (1,108,873).

27. Cornilleau teaches the structure substantially as claimed, including a folding table tennis table comprising a rigid support (4), two table tops (6, 8) that are movable relative to said support between a horizontal position and a vertical position (see Figure 1), each table top co-operating with the support to form a structure of configuration that is reversibly foldable between an unfolded state corresponding to the horizontal position of the table top and a folded state corresponding to the vertical position of the table top, which structure includes retractable locking means to lock said structure in said folded

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state; wherein each table top is provided with a finger (30) projecting from each of its side edges and engaged in a corresponding guiding slideway (34, 35) secured to the support and extending in a generally vertical direction (see Figure 1), and in which the above-mentioned locking means comprise, on each side edge of the table top, a bolt (32) of axis perpendicular to said side edge and urged resiliently along its axis towards the support, which support presents a recess (38) facing each side edge and forming a catch for receiving the corresponding bolt when the structure is in at least one of its two above-mentioned states; wherein the support presents another recess (40) forming a catch for receiving the corresponding bolt when the structure is in its other state (see Figure 1) and wherein each finger (30) is in the form of a bushing, each bolt (32) being slidably mounted inside the finger, and each catch associated with said bolt being located in the bottom of the slideway associated with said finger; wherein the locking means of each structure include means for actuating them against their resilient return means, said means comprising a link (150) connected to each bolt and extending along the bottom face of the table top, and pull means (154) for applying traction to said link and extending to the vicinity of the outside end of the table top (see Figure 6).

28. The only difference between Cornilleau and the invention as claimed is that Cornilleau fails to teach a structure wherein the foldable structure includes, in addition to said locking means, abutment means arranged to engage to prevent unfolding of the foldable structure when the configuration of the structure comes close to but does not yet reach a configuration corresponding to said folded locked state, thereby opposing accidental reversibility in an almost-locked configuration of the structure; wherein the abutment means comprise the bolt and a secondary recess in the support, defined beside

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the catch by a wall over which the bolt can slide, and at its end remote from the catch by a shoulder for stopping the bolt; wherein the abutment means comprise the bolt and another secondary recess in the support, defined beside the other catch by a wall over which the bolt can slide, and at its end remote from said other catch by a shoulder for stopping the bolt; each secondary recess associated with said bolt being located in the bottom of the slideway associated with said finger.

29. Methven, however, teaches the inclusion of abutment means comprising a slanted secondary recess (i.e., the volume located between items 13-15) defined beside a catch (9) by a wall (13) over which a bolt (5) can slide; wherein said slanted secondary recess is located such that said bolt strikes said secondary recess prior to striking said catch.

The examiner points out that inclusion of a slanted secondary recess, as taught by Methven, adjacent the catches, in the supports of the structure of Cornilleau, would obviously produce recesses each comprising a shoulder capable of stopping the bolt, at the end remote from the catch; and that the teaching of Methven, taken as a whole, would obviously suggest including a slanted secondary recess at the end of each catch that was distal from the ends of said slideways.

30. It would have been obvious to one of ordinary skill in the art to include a slanted secondary recess beside each of the catches of the structure of Cornilleau in order to increase user satisfaction by providing deceleration for the tabletops during opening & closing operations, thereby providing the structure substantially as claimed.

31. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornilleau (FR 2,729,302) and Methven (1,108,873) as applied to the claims above, further in view of Reynolds (5,531,493).

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32. Cornilleau and Methven teach the structure substantially as claimed, including pair of links (150) and pull means (152); wherein the link connected to each bolt is made integrally with the bolt (32), while the pull means comprise a rod slidably mounted under the table top (see Figure 6) and provided at its end adjacent to the outside end of the table top with a handle (154); and wherein motion-transfer means (i.e., the combination of Items 156, 162, & 164) are included at the intersection between said links and said pull means.

33. The only difference between Cornilleau and Methven and the invention as claimed is that Cornilleau and Methven fail to teach a structure wherein each link is a rod provided, at its end remote from the bolt, with a rack; and wherein the rod of the pull means is provided its end distal from the outside end of the table top with a rack that cooperates with a pinion meshing with the rack of the rod of each bolt.

34. Reynolds, however, teaches a pair of links (18a, 18b), each link being a rod being provided, at an end remote from a second structure (8a, 8b), with a rack (20a, 20b); and motion-transfer means comprising the combination of said racks (20a, 20b), along with a rack (22) provided at an end of a pull means (16), and pinions (24a, 24b) that cooperate & mesh with said racks (20a, 20b, 22). See Figures 2a & 3.

35. Whereas the links and motion-transfer means of the structure of Cornilleau as modified by Methven and the links & motion-transfer means taught by Reynolds are equivalent alternative structures for accomplishing similar purposes; and whereas solid, rigid links would be more durable than flexible links; it therefore would have been obvious to one of ordinary skill in the art to replace the links & motion-transfer means of the structure of Cornilleau as modified by Methven with as links & motion-transfer

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means as taught by Reynolds in order to increase their durability, thereby providing the structure substantially as claimed.

36. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornilleau (FR 2,729,302), Methven (1,108,873), and Reynolds (5,531,493) as applied to the claims above, further in view of Brinson (2,431,105).

37. Cornilleau, Methven, and Reynolds teach the structure substantially as claimed, including racks and pinions; the only difference being, Cornilleau, Methven, and Reynolds fail to teach a structure wherein the pinion is mounted to turn in a housing for guiding the above-mentioned racks, the thickness of the pinion being not less than the sum of the widths of the racks.

38. Brinson, however, teaches a pinion (16) mounted to turn in a housing (4) capable of guiding linearly-mobile components (14, 21), wherein the thickness of said pinion (16) is not less than the sum of the widths of said linearly-mobile components (14, 21).

39. It would have been obvious to one of ordinary skill in the art to include a housing, as taught by Brinson, about the racks & pinions of the structure of Cornilleau as modified by Methven & Reynolds in order to prevent extraneous matter from interfering with the proper operation of said racks & pinions; and to make the thickness of each said pinion greater than the sum of the widths of said racks, as taught by Brinson, in order to increase the compactness of said racks & pinions, and to increase reliability by reducing the chance that one of said racks might slip off said pinion, thereby providing the structure substantially as claimed.

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40. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornilleau (FR 2,729,302), Methven (1,108,873), Brinson (2,431,105), and Reynolds (5,531,493) as applied to the claims above, further in view of Viney (6,478,345).

41. Cornilleau, Methven, Brinson, and Reynolds teach the structure substantially as claimed, including a housing, and a cross member (see Figure 6 of Cornilleau) forming the end edge of the table top adjacent to the net when the table is in the playing position; the only difference being, Cornilleau, Methven, Brinson, and Reynolds fail to teach a structure wherein the housing possesses means for fixing it to a cross-member forming the end edge of the table top adjacent to the net when the table is in the playing position. Viney, however, teaches a housing (50) having fixing means (see column 4, lines 33-35) for fixing it to a cross-member (70). It would have been obvious to one of ordinary skill in the art to utilize fixing means, as taught by Viney, to fix the housing of the structure of Cornilleau as modified by Methven, Brinson, and Reynolds to the cross-member of said structure in order to prevent extraneous movement by said housing, thereby providing the structure substantially as claimed.

42. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cornilleau (FR 2,729,302), Methven (1,108,873), Brinson (2,431,105), Viney (6,478,345), and Reynolds (5,531,493) as applied to the claims above, further in view of Dupraz (FR 2,747,280).

43. Cornilleau, Methven, Brinson, Viney, and Reynolds teach the structure substantially as claimed, including a pull rod having a pinion & handle; the only difference being, Cornilleau, Methven, Brinson, Viney, and Reynolds fail to teach a pull rod received under a cover extending between the pinion and the handle. Dupraz,

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however, teaches a horizontally-movable member (3) received under a cover (10) extending between two ends of said member (3). It would have been obvious to one of ordinary skill in the art to include a cover over at least a portion of the pull rod of the structure of Cornilleau as modified by Methven, Brinson, Viney, and Reynolds in order to shield said pull rod from the elements, thereby providing the structure substantially as claimed.

Response to Arguments

44. Applicant's arguments filed 27 June 2007 have been fully considered but they are not persuasive.

45. Applicant's arguments with respect to claims 20-28 have been considered but are moot in view of the new ground(s) of rejection.

46. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Ing whose telephone number is (571) 272-6536. The examiner can normally be reached on Monday through Friday, 7:30 am - 4:00 pm.

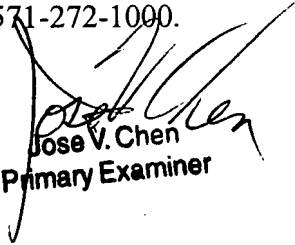
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWI 

5 July 2007


Jose V. Chen
Primary Examiner